JPRS 77266

28 January 1981

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 147

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Indexes to this report (by keyword, author, personal names, title and series) are available from Bell & Howell, Old Mansfield Road, Wooster, Ohio 44691.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS 77266

28 January 1981

WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 147

CONTENTS

WORLDWIDE AFFAIRS

Brazil, Japan Set Policy on Transborder Data Flow
(LE MONDE DIPLOMATIQUE, Dec 80) 1

Briefs
USSR, Finland Radio Protocol 4
New Telephone Apparatus Developed 4

ASIA

INTER-ASIAN AFFAIRS

Asians Demand Cut in Satellite TV Charges
(MORNING NEWS, 22 Dec 80) 5

AUSTRALIA

Bright Satellite Communications Future Predicted
(Nicholas Rothwell; THE FINANCIAL AUSTRALIAN, 25 Nov 80).. 6

British Ptarmigan System Applicable to Nation
(THE FINANCIAL AUSTRALIAN, 17 Nov 80) 8

Siemens Wins PABX Contract From Telecom
(THE FINANCIAL AUSTRALIAN, 17 Nov 80) 10

Advanced Microcircuit Plant Planned at Newport
(THE FINANCIAL AUSTRALIAN, 25 Nov 80) 11

Computer Used To Control Water Pipeline in West
(THE FINANCIAL AUSTRALIAN, 25 Nov 80) 12

Telecommunications 'Users Group' Formed in Sydney
(THE WEST AUSTRALIAN, 19 Nov 80) 14

High Growth Rate Predicted for Data Processing Industry
(John Puttick; THE FINANCIAL AUSTRALIAN, 17 Nov 80) 16

'Hams' Want TV Channel 0 Switched to UHF Frequency
(Nicholas Rothwell; THE AUSTRALIAN, 21 Nov 80) 19

Briefs
Private Satellite Shares 20
Prime Computer Software 20

INDIA

Panel Formed To Restructure Information Ministry
(THE HINDU, 29 Nov 80) 21

Satellite Plans To Benefit Communications
(THE STATESMAN, 15 Dec 80) 22

Space Technology To Aid Rural Television
(THE TIMES OF INDIA, 22 Dec 80) 24

Briefs
INSAT Staff Training 26

JAPAN

Briefs
New Super Diode Developed 27

MALAYSIA

Briefs
Telecommunications Program Announced 28

PAKISTAN

Briefs
New Radio Station 29

PEOPLE'S REPUBLIC OF CHINA

Briefs
Shortwave Communications 30

THAILAND

CPT Shifts From Morse Code To Voice Transmission
(NATION REVIEW, 15 Jan 81) 31

Briefs
Radio Photo Via Satellite Service 32

VIETNAM

Briefs
News Agencies Meeting Held 33

CANADA

Canada's Attitude Toward Transborder Data Flow
(Charles M. Dalfen; LE MONDE DIPLOMATIQUE, Dec 80) 34

EAST EUROPE

INTERNATIONAL AFFAIRS

Briefs
'CTK'-'ADN' Cooperation Protocol 37
Czechoslovakian, Bulgarian Radio Agreement 37

YUGOSLAVIA

Briefs
Radio, TV Agreement Signed 38

LATIN AMERICA

ARGENTINA

Briefs
National Power Grid 39
New FM Radio Station 39

GUYANA

Briefs
News Agency Starts Operations 40

PERU

Briefs
Terrorist Destroys Microwave Tower 41

NEAR EAST AND NORTH AFRICA

INTER-ARAB AFFAIRS

Kuwait, Jordan To Fund Updated Phone Network
(KUWAIT TIMES, 29 Dec 80) 42

SULTANATE OF OMAN

Telecommunications Progress Reviewed
('UMAN, 15 Nov 80) 43

YEMEN ARAB REPUBLIC

Official Discusses Development of Telecommunications
(Muhammad al-'Arashi Interview; AL-JUMHURIYAH, 23 Nov 80). 47

SUB-SAHARAN AFRICA

INTER-AFRICAN AFFAIRS

Progress Made in Implementation of PANAFTEL Network
(Mike T. James; NEW LIBERIAN, 19 Dec 80) 50

KENYA

Briefs

Broadcasting Development 52

MADAGASCAR

Radio-TV Innovations Announced
(MADAGASCAR-MATIN, 13 Nov 80) 53

MALI

Briefs

PRC Telecommunications Aid 55

USSR

Briefs

TV Development Reported 56

WEST EUROPE

INTERNATIONAL AFFAIRS

Nordic Ministers Agree To Continue Nordsat Study
(Jene Thomsen; BERLINGSKE TIDENDE, 22 Nov 80) 57

DENMARK

Faeroes Become Last European Area To Get Television
(Calle Pauli Ola Sall; DAGENS NYHETER, 30 Nov 80) 59

FRANCE

Opportunities, Accomplishments in Plans for Telematics
(Pierre Zapalski; LE FIGARO, 2 Dec 80) 63

SWEDEN

Briefs

Computer-Guided Phone Exchanges 65

BRAZIL, JAPAN SET POLICY ON TRANSBORDER DATA FLOW

Paris LE MONDE DIPLOMATIQUE in French Dec 80 p 17

[Article by A.L.: "Concrete Measures to Protect National Industry"]

[Text] Brazil is the first and at the moment the only country to declare without hypocracy that it favors control and limitation of transborder data flow. This position shocked the IBI [expansion unknown] Conference in Rome, where members of the Brazilian delegation, under the irritated gaze of the Americans and of those in charge of the OECD [Organization for Economic Cooperation and Development], distributed a text summing up their theoretical position: "Brazil today is applying a policy of examining these activities on a case by case basis, granting specific permits, always on a temporary basis, and prohibiting the utilization of information originating in Brazil and teleprocessed by computers located abroad for tasks that can be accomplished in the country."

It is a question of avoiding the geographic separation of a productive process from a center of decision, of opposing the attainment of information by foreign firms in order to develop national data banks. "Data processing is not neutral, in the sense that it is imbued with the culture of those who have given rise to it. Language, in its syntactic and semantic aspects, is very greatly influenced."

In Rome, Dias Pipper and Cesario Wanderley were able to specify the forms of control now applied at the borders of Brazil. It all began in 1976 with a governmental decision to create a national data processing industry. Some rigorous contingencies limited importations in the field and several national firms embarked on the manufacture of mini-computers. A coordinating committee for data processing activities was charged with implementing this policy and in 1979 a new agency, directly connected with the National Security Council of the presidency, continued the operation. The SEI (Special Secretariat for Data Processing) also checks permits for data transmission on a case by case basis. A very explicit questionnaire has to be filled in by the multinational companies that wish to transmit data. It includes types of data to be transmitted, software, destination, rate of transmission, etc. From May 1978 to January 1980, 17 companies filed requests. Applications for the international reservation of airplane seats were concurred in; but companies like Control Data, that desired time-sharing activities, were refused permits for several reasons: "This activity has a negative impact on the balance of payments:

- It will limit the development of time-sharing for national companies;

- This service might affect the emerging micro-processing national industry (...);

- There may be a possible impact on the attempts to evolve national activity in the field of software*.

There was also a refusal for transmissions from economic and bibliographic data banks. By contrast, companies that desired to be linked with specific data banks for their own needs were given a permit.

The matter of linkages between a branch and a parent company has been posed several times and has given rise to difficult negotiations. Consent was given when the committee judged that the impact on the national economy was negligible. In spite of the problems that are posed, the Brazilians consider that the case by case approach makes it possible for governmental authorities to better circumscribe problems and to protect the chances for a re-balancing of present dependency relations.

Japanese Pragmatism

At the beginning of the 1980's, Japan asserts itself as one of the principal leaders in the matter of international data transmission. Noda, minister of industry, at the OECD Conference in October 1980 recalled that his country had spent $5,000 million for software and $870 million for data transmission. Sixty percent of the 65,000 computers in Japan are installed by national companies, IBM being the chief foreign supplier. Considerable investments for data processing and software research are foreseen for 1979-1983.

If the Japanese authorities have not advanced any definite theory on the matter of transborder data flow, they do engage in fierce protectionism. Language already constitutes a significant barrier, which renders access to economic data on Japan difficult--and the country makes no effort to translate. The Japanese branch of the multinational American Control Data company waited 2 years before receiving authorization to install a linkage between the United States and Tokyo. The KDD Company, which handles all international Japanese linkages, authorized Control Data to be linked with only one of its five centers in the United States and then only on a precarious basis.

Since 1976, the date of the authorization, Control Data repeated the interventions of the American government, but the situation remains unchanged**. The directors of the Tymnet network, who contemplated linking Japan with big international data banks, experienced similar difficulties. KDD technicians increased the number of technical directives in order to delay and limit the interconnection of circuits of the Tymnet network, which occurred only this past October. The American supplier of SDC [expansion unknown] data banks who wanted to be located in Japan, also had to create a preponderately Japanese branch and install its computer in Japan. Doubtless these restrictions will be dropped when Japan considers that it has data banks and networks capable of ensuring its independence.

---

* Mario Dias Pipper, IBI Conference, Rome, June 1980.

** "Transnational Data Report," vol 3, May 1980.

8255
CSO: 5500

BRIEFS

USSR, FINLAND RADIO PROTOCOL--A working protocol on cooperation between USSR Gosteleradio and Finnish television and radio provides for an expansion of exchange of material about the life of the Soviet and Finnish peoples. The document was signed in Moscow today. Particular attention will be given to programs devoted to the 26th CPSU Congress. [Text] [LD201434 Moscow Domestic Service in Russian 1830 GMT 19 Jan 81]

NEW TELEPHONE APPARATUS DEVELOPED--L.M. Ericsson has received orders from Latin America having a total value of 460 million kronor. The orders come from El Salvador, Colombia, Venezuela and Bolivia. El Salvador is the 25th country choosing L.M. Ericsson's computer-controlled telephone exchanges of the AXE type. That country has ordered 54 million kronor worth of equipment. Colombia had already chosen the AXE and now has ordered 140 million kronor worth of equipment. Furthermore, L.M. Ericsson is to deliver other telephone equipment to the cities of Bogota, Medellin and Minizales. In Venezuela, that country's telecommunications administration has ordered 170 million kronor worth of equipment and Ericsson is sending 10 million kronor worth of material to Bolivia. L.M. Ericsson and the multinational corporation ITT are also participating in the expansion of the telephone network in Mexico. [Text] [Stockholm DAGENS NYHETER in Swedish 20 Dec 80 p 20] 9266

CSO: 5500

ASIANS DEMAND CUT IN SATELLITE TV CHARGES

Karachi MORNING NEWS in English 22 Dec 80 p 3

[Text] Islamabad, Dec. 21: The representatives of Asian system of news have strongly recommended charging less from developing countries for receiving television programmes and news through satellites, All India Radio reported last night.

Speaking at the concluding session in New Delhi yesterday they said, the satellite charges in the Asian Pacific Ocean zone are higher as compared to the American and European countries.

They were of the view that the charges are higher than the paying capability of the information media of developing countries. It was therefore suggested that a special standard should be evolved to determine charges for developing countries, the Radio said.--APP.

CSO: 5500

BRIGHT SATELLITE COMMUNICATIONS FUTURE PREDICTED

Canberra THE FINANCIAL AUSTRALIAN in English 25 Nov 80 p 2

[Article by Nicholas Rothwell]

[Text] A top US communications expert has predicted a key role for satellites in the future development of Australia.

Dr Norman Abramson, a lecturer in satellite communications, outlined how satellites could upgrade Australian society in a speech given at a Sydney seminar on the satellite revolution last week.

His talk came in the same week as the launching of the privately owned Satellite Business System, which is the first private system aimed at exploiting the potential for cheap satellite communication.

Dr Abramson expects SBS, owned by IBM and two other communications firms, to be the first of many private satellites.

Two Australian consortiums have already expressed interest in the idea of privately owned receivers for using satellite facilities.

Australia's national communications satellite system, announced in October 1979 by the then Minister for Post and Telecommunications, Mr Staley, had been designed to satisfy the country's needs.

It would provide national domestic telephone, telex and telegram services, radio and television, as well as defence communications.

Dr Abramson predicted that satellite technology would have major implications for Australia.

Education could be overhauled using communication satellites. "Australia, with its isolated centres and history of remote education via correspondence and wireless, is well suited to such applications," he said.

The National Library of Australia was reviewing the potential for satellite transmission of educational films and radio to institutions and hirers.

Archival material and programs could be syndicated by satellite to radio and television stations.

Newspapers could be transmitted throughout Australia by satellite, allowing more complete coverage and dissemination of national news.

More than 500,000 people in Australia, who, because of their remote location had no access to television, would benefit from satellite broadcasting.

Commercial stations would be able to reach the large numbers of people who were limited to ABC transmissions, and the quality of the signal beamed to 900,000 viewers could be improved.

Commercial radio could also have access to the huge market of four million listeners restricted to the ABC's Radio 3 service bringing increased competition and advertising opportunities.

CSO: 5500

BRITISH PTARMIGAN SYSTEM APPLICABLE TO NATION

Canberra THE FINANCIAL AUSTRALIAN in English 17 Nov 80 p 5

[Text] The largest single British defence communications contract has been won by the Plessey Company.

Much of the technology developed could be adapted by the company for DISCON--the Australian Defence Integrated Secure Communications Network.

Plessey has been selected to bid as prime contractor for DISCON in Australia.

The British Ministry of Defence contract is worth more than $300 million over four years.

It is for the prime contractorship for the production of Ptarmigan, the new battlefield trunk communications system for the British Army and RAF in West Germany.

It is the first stage in a three-stage program ultimately worth several hundreds of millions of pounds.

The contract is good news for the UK electronics industry.

Protected

Ptarmigan development has already provided 1000 new job opportunities in the industry.

The production contract will consolidate existing employment for hundreds more and will create another 400 new jobs--about 200 in Plessey alone.

Derivatives of the all-British developed and manufactured Ptarmigan system are also expected to attract interest in export markets.

The Ptarmigan system represents a new age in military communications for the active war theatre.

It brings together an all-digital, highly flexible, secure and mobile area communications network built to carry cryptographically-protected voice, telegraph, facsimile and data calls with conference and pre-emption facilities.

It also contains many protective features in the face of enemy attack.

Ptarmigan will replace the Bruin system presently being used by the British forces assigned to NATO and will provide a wider range of communication facilities than any of its predecessors.

It incorporates many improvements made possible by the use of stored program controlled electronic circuit switches in place of conventional electromagnetic exchanges.

The first elements of Ptarmigan will be in service in the early 1980s.

The full system will be operational later in the decade and the technology is confidently expected to remain in operation beyond the end of the century.

CSO: 5500

SIEMENS WINS PABX CONTRACT FROM TELECOM

Canberra THE FINANCIAL AUSTRALIAN in English 17 Nov 80 p 5

[Text] Telecom Australia has placed a 4-year contract for Stored Program Control (SPC) PABX Equipment with Siemens Industries Ltd.

Tenders were called world-wide and Siemens, one of two companies selected, was successful with its EMS System (Electronic Microprocessor Stored Program Control), which was introduced in Europe last year and has already sold several thousand systems including a 20,000 extension installation for the European Parliament in Brussels.

Siemens has been active in the Australian telecommunications market for 20 years and now employs 900 people here.

Its manufacturing facilities at Richmond in Victoria will be expanded immediately and an investment of several million dollars is planned in buildings, manufacturing plant and test equipment.

Included in numerous recent orders for Stored Program Control PABX systems are major contracts for TAA (1900 extensions), David Jones (1100 extensions) and the Perth Water Board (900 extensions).

Features of the new system are many and place particular emphasis on time saving and low energy consumption.

CSO: 5500

ADVANCED MICROCIRCUIT PLANT PLANNED AT NEWPORT

Canberra THE FINANCIAL AUSTRALIAN in English 25 Nov 80 p 13

[Text] A manufacturing plant that will produce advanced microcircuits for the world market is to be set up at Newport in South Wales.

Inmos, the microchip company established by the UK Government's National Enterprise board, said that work on the $50 million plant would begin early next year.

Production was scheduled to start in mid-1982.

The Newport plant would specialise in high capacity memory circuits and would produce tens of millions a year, Inmos said.

The company, with headquarters and a research centre in Bristol in south-west England, already has a pilot plant in Colorado Springs in the US where its first product, a 16K static random access memory circuit, has been produced.

Welcomed by Experts

Inmos said that samples of the new microcircuit had become commercially available in September and had been welcomed by electronics experts as innovative.

"We believe this puts us at least three months ahead of our nearest competitor, a significant time lead in this industry," Inmos said.

Full commercial production would start at the Colorado factory early next year.

"The plan has always been for pilot production to start in the US plant, with full production eventually being transferred to the UK plant.

"The South Wales factory will be the first of four projected plants in the UK."

Inmos said it would be using three of the most advanced methods of chip production--water stepping, plasma etching and ion implantation.

These were said to give higher yields and to make smaller, faster, more reliable, more predictable and more accurate circuits.

CSO: 5500

COMPUTER USED TO CONTROL WATER PIPELINE IN WEST

Canberra THE FINANCIAL AUSTRALIAN in English 25 Nov 80 p 6

[Excerpts] The Kalgoorlie Pipeline, an ambitious project to supply water to the Western Australian goldfields at the turn of the century, still snakes its way across the land.

Now the Goldfields and Agricultural Water Supply Scheme, which supports 112 towns and 2.7 million hectares of farmland, has moved into the electronic age.

It has installed a Janus Telnet central monitoring and control system supplied by Deltec Pacific.

The system became fully operational last month.

Engineers can tell, by glancing at a visual display screen, the status of the pumps and tank sites along 310 km of the pipeline.

"Status" covers such things as pumping head, water level, equipment faults and suction pressure.

They can also determine which pumps use power most efficiently and then use those pumps more frequently.

This remote telemetry control system was designed and, to a great extent, manufactured by Deltec Pacific's digital engineers.

The Victoria Park based company was awarded the $500,000 contract by the WA Department of Public Works in May last year.

The main computer at Cunderdin--the half-way point on the network--can communicate with 28 outstations via Telecom leased lines.

Designed to operate in a failsafe way, the outstations also communicate emergency data to the control via an automatic dialling unit (ADU).

The ADU's are activated by microprocessors which respond to data fed to them by multiplexor sensors at the remote site.

Status data is transferred from outstations to the control in seven seconds

Priority Reports

A computer at the control then reads the information, and the operator can issue commands to correct the situation.

Two line printers are used to produce a log and priority reports on the status of the pipeline.

Four control operators, working in shifts, and a service team now control and monitor the pipeline.

CSO: 5500

TELECOMMUNICATIONS 'USERS GROUP' FORMED IN SYDNEY

Perth THE WEST AUSTRALIAN in English 19 Nov 80 p 73

> [Text] Representatives of more than 50 companies agreed in Sydney yesterday to set up an Australian telecommunications users' group.

The group's main aim will be to obtain for Australian business the best communications services at the lowest possible cost.

Yesterday's meeting, convened by the Sydney Chamber of Commerce, fixed February 10 next for the inaugural meeting.

The chamber's executive director, Mr David Abba, said the Minister for Communications, Mr Sinclair, would attend that meeting.

Mr Abba agreed that one of the matters to be considered was whether private ownership of the proposed communications satellite would best serve the interests of Australian business generally.

He said: "obviously the way the Australian communications satellite is proceeded with, the way it is run and organised, its functions and access to it will be one of the items to be discussed by the users group, because it has great importance for communications in the future."

Support

Mr Abba said yesterday's meeting was called mainly to ascertain the extent of support for ATUG and to appoint an interim executive.

Mr Abba told the meeting that telecommunications and related fields were evolving dramatically.

He said: "While technology races ahead and the practical applications pop up out of the woodwork, the social implications and human impact of today's technological revolution are rarely canvassed, let alone debated publicly.

"Manufacturers and suppliers have, however, always ensured that their interests are well known--as has Telecom. Even so there is now a growing concern on the part of government to evaluate and possibly reconsider Telecom's right to compete in the market place.

"Users of the telecommunications systems--the paying consumers--have been slow in making their interests and requirements known and in letting the authorities know about the kinds of services and facilities they require.

"Business Telecommunications Services Pty Ltd and the mooted media consortium (John Fairfax and Sons, David Syme and company and the HERALD and WEEKLY TIMES group) are two examples of recent responses to the communications challenges facing us into the eighties and nineties.

CSO: 5500

HIGH GROWTH RATE PREDICTED FOR DATA PROCESSING INDUSTRY

Canberra THE FINANCIAL AUSTRALIAN in English 17 Nov 80 p 10

[Article by John Puttick, manager, EDP Forecast for Management, Datec Pty Ltd]

[Text] Most of the key indicators to the development of the data processing industry identified in the Datec EDP Forecast for Management for 1980 suggest that high rates of growth will be sustained in several areas.

A clear picture is given by four indicators--DP budgets, hardware resources, salaries and staff turnover.

The EDP industry saw an across-the-board increase in DP budgets of almost 25 percent this year, which is three percent greater than the predicted increase for 1980.

With an annual inflation rate of slightly more than 10 percent, DP budgets are increasing at a real rate of nearly 15 percent. Budget increases are greatest for those with small budgets.

Those organisations with DP budgets of up to $500,000 a year all reported more than a 25 percent increase in DP budget. The lowest rate of increase, of 16 percent reported, is by organisations with a data processing budget in the $1 million to $2 million category.

This result is consistent with the infiltration of data processing into smaller businesses and is evidenced by the sustained demand for minicomputers.

Public utilities reported the largest average budget increase, with a massive 44 percent actual increase in DP budget between last year and 1980.

Next year, this same industry group will lead the field jointly with the mining sector, with a planned 30 percent increase in budgets.

The predicted overall increase for 1981 is 22 percent. This is the same rate predicted for 1980 which was, in practice, exceeded, with actual expenditure being three percent more than budget.

We expect this will also be the case in 1981. Thus a predicted rise in real terms of 14 percent is again likely.

At this compound rate of increase, DP budgets will double in real terms by 1985.

As might be expected with the continually improving price/performance ratio for hardware, the proportion of the DP budget being allocated to hardware spending is declining.

Nevertheless, respondents to the Datec survey for the forecast plan hardware increases in all categories.

The rate of increase in the number of mainframes anticipated in the next few years is only 12 percent. This is a low rate of growth compared with the other components of hardware spending, and is more than offset by the anticipated growth for minicomputers.

Over the industry as a whole, the growth in the number of minis is expected to be 40 percent over two years, but is not particularly confined to the small business sector.

Organisations with DP budgets of more than $500,000 plan to increase the number of minicomputers by 42 percent.

This rate is supported by the reported growth in spending at remote sites, which has doubled from around 25 percent in 1979 to 50 percent this year, reflecting a major push into distributed data processing.

This thrust is further confirmed by the planned growth in the number of terminals over the next two years.

Despite the already large base of installed terminals, the rate of growth appears to be increasing.

The rate planned for the next two years is 66 percent generally over the industry, with growth rates of more than the 200 percent mark in some sectors.

These dramatic growth rates in the terminal market result from two major trends--first, the increasing power of computers, coupled with the improved software products that allow the development of online systems and, second, the pressure from the user base for distributed data processing.

The salary component of the data processing budget is increasing, relative to the other components. As reported above, DP budgets are increasing at a rate well more than the annual inflation rate, and staff costs are taking a greater slice of this budget each year.

This implies that there is still significant demand pressure on data processing salaries. This observation is supported by the fact that all salary ranges reported for various job categories fall within a narrow band.

For example, the average minimum and maximum salary for analyst programmers is $17,300 to $19,600 respectively. Another example is project leaders, where the average range is $20,800 to $24,300 respectively.

An examination of salary ranges by industry group highlights the mining industry as having a higher salary profile for most job categories, including those of operator, analyst programmer, systems analyst and project leader.

The media industry has the highest salaries for trainees and systems programmers.

Most EDP staff in Australia have a performance review once per year and, on average, the EDP salary scales are adjusted one and a half times a year.

Staff turnover within the data processing industry has increased substantially over the past 12 months, and is now running at 30 percent a year.

This represents more than 10,000 systems and programming staff changing jobs during the past 12 months.

The industry sector with the most stable data processing staff is the mining industry, which has an annual staff turnover of 17 percent. As reported above, the mining sector has the highest salary range in most salary groups.

Industries with higher than average staff turnover are manufacturing, retail and education.

The rate of staff turnover consistently improves with the rate of EDP expenditure. Those with the largest EDP budgets have the most stable staff, while those with DP budgets of less than $250,000 have staff turnover rates of more than 40 percent a year, so that staff turnover is hurting the sites that can least afford it.

This trend, with the analyses of salary ranges, highlights the upward mobility of systems and programming staff, constantly seeking greater dollar awards.

CSO: 5500

'HAMS' WANT TV CHANNEL 0 SWITCHED TO UHF FREQUENCY

Canberra THE AUSTRALIAN in English 21 Nov 80 p 4

[Article by Nicholas Rothwell]

[Text]

AMATEUR radio operators want the multicultural Channel 0 television station switched to another frequency because its broadcasts are disrupting their activities.

They want Channel 0 to be phased out of the very high frequency (VHF) band within three months.

The Sydney Channel 0 Action Committee has also urged the Minister for Communications, Mr Sinclair, to prevent the Multicultural Broadcasting Corporation from "misleading" viewers by saying the channel is a permanent service on the VHF band.

The committee's spokesman, Mr Sam Voron, said yesterday Channel 0 was retarding public awareness of the ultra-high frequency (UHF) waveband.

If Channel 0 was allowed to continue broadcasting on the same wavelength for long the development of UHF TV would be very slow.

"Only a short temporary life for Channel 0 will make the vital introduction of UHF TV sucessful."

Channel 0's poor reception had encouraged retailers to sell "reception improvement kits" for $300 which would make people less willing to switch to UHF sets.

JAMMED

Mr Voron said radio users wanted Channel 0 shifted from VHF because:

- Extensive amateur radio activity had been jammed by the station's broadcasts;
- An important frequency widely used for compiling international amateur observations and research had become useless because of the Channel 0 signal;
- Most of Australia's top ionospheric researchers had been put out of action in an area of international co-operation where Australia had traditionally excelled, and;
- The Channel 0 band was also used as a frequency for computer and other video outputs in the consumer and industrial sector which had suffered because of the TV transmissions.

UHF and VHF are different parts of the radio spectrum which cannot both be picked up by ordinary TV sets.

Under plans announced this year, Channel 0 is to be moved off the crowded and over-used VHF band to UHF where its reception will be of better quality, but the change has not been stressed.

Committee members fear that once the station has become established it will be impossible to change over to UHF.

They argue that it will be hard to win support among migrants for the change to UHF because they will feel they are being victimised if "their" station is moved to a band which requires expensive new equipment for reception.

CSO: 5500

BRIEFS

PRIVATE SATELLITE SHARES--Canberra.--The Federal Government has advertised for possible private enterprise involvement in Australia's domestic communications satellite. In national advertisements today, it has called for private firms and individuals to register an interest in forming a company to own and manage the system. The Communications Minister, Mr Sinclair, said yesterday interested parties would have until December 4 to approach the government. "The government is examining a number of options for the ownership of the satellite system," Mr Sinclair said. "One such option is the establishment of a company in which private firms or individuals would hold up to 49 percent of the equity capital. The balance would be held in the public sector with the Overseas Telecommunications Commission having a major interest." Tenders for the construction of the $300 million system have already been called by the government and are scheduled to close on March 2 next year. On September 18, the former Post and Telecommunications Minister, Mr Staley, said the system would be wholly owned by OTC. But he said the government had not ruled out the possibility of a private-public sector ownership mix. [Text] [Brisbane THE COURIER-MAIL in English 19 Nov 80 p 21]

PRIME COMPUTER SOFTWARE--Cincom Systems has released terminal management software for Prime computers. Known as TSM (Total screen management), the software uses the Total database management system for high speed format retrieval. It is designed to support any combination of most of the terminal types commonly used with Prime equipment. Features are said to include automatic input validation, operator or program invoked hard copy which does not require add-on hard copy equipment hooked to the terminal, and full numeric formatting with decimal alignment. Cincom said that multiple security levels protected formats, displayed data, screen contents and the database itself from corruption and unauthorised access. Online jobs could be run as batch with no program alteration. Mr Gus Jansen, Cincom's technical projects manager, who developed the system, said that the reduced programming and maintenance efforts provided by TSM would quickly offset the price. "Users can create screen formats easily, before the EDP department starts program development," he said. [Text] [Canberra THE FINANCIAL AUSTRALIAN in English 25 Nov 80 p 8]

CSO: 5500

PANEL FORMED TO RESTRUCTURE INFORMATION MINISTRY

Madras THE HINDU in English 29 Nov 80 p 29

[Text] New Delhi, Nov. 28. The Government has constituted an advisory committee with Mr. G. Parthasarathy, former Vice-Chancellor, Jawaharlel Nehru University, as Chairman, for restructuring the media organisations under the Information and Broadcasting Ministry.

The 14-member committee was announced by the Minister for Information and Broadcasting, Mr. Vasant Sathe, in the Lok Sabha today.

The committee will also advise the Government on measures to associate the people more directly in devising innovative programmes in the different I and B media organs, through creative participation and inter-communication so as to enrich their cultural identity and promote national integration.

It will help determine priorities in different areas of media development for providing adequate infrastructural support and strengthening the capacity of the media to reach out to all sections of the people.

Mr. Sathe said that the committee would make suitable recommendations to the Government from time to time, covering organisational matters, changes in policy formulations as well as programme implementation.

The other members are: Mr. E. Alkazi, Dr. Mulk Raj Anand, Mr. Basu Bhattatharya, Dr. E.V. Chitnis, Mr. N. L. Chawla, Mr. K.S. Duggal, Mr. B. V. Karanth, Mr. P.V. Krishnamurthy, Mr. K. Kurian, Dr. V.K. Narayana Menon, Dr. (Mrs) Sumati Mutatkar, Dr. N. Bhaskara Rao and Mrs. Fatima Karia.--PTI.

CSO: 5500

SATELLITE PLANS TO BENEFIT COMMUNICATIONS

Calcutta THE STATESMAN in English 15 Dec 80 p 9

[Text] Bangalore, Dec. 14.--The Indian Space Research Organization is poised to take up major space programmes in the next 10 years, consolidating the gains in space research during the past 17 years, reports UNI.

The programme will revolutionize domestic communications and TV broadcasting, besides facilitating the better management of national resources so that the benefits percolate to the grassroot level.

ISRO's programmes during the next decade, at an estimated outlay of Rs 800 crores include the launching of Remote Sensing Satellites, replacing the Indian National Satellite to be launched in 1982 by a fully Indian-made proto-INSAT, launching of earth observation satellites, launching of our own Advanced SLV and Polar SLV to carry payloads of 150 kg and 600 kg respectively, while continuing the SLV-3 programme.

Encouraged by the total success of SLV-3 and the satisfactory performance of the Indian-made Aryabhata, Bhaskara-1 and Rohini satellites, the ISRO is now preparing to launch SLV-3 (D-1) in March next year with a 45-kg payload.

Work on ASLV and PSLV are already under way. While ASLV is expected to be launched by 1983, PSLV will take about six years for launching. SLV-3 will continue to be launched once in six months for another three years to place in orbit small playloads for scientific experiements. [as published]

The Vikram Sarabhai Space Centre is now engaged in designing and fabricating the ASLV based on SLV-3 as the core with minimum modifications and with two strap-on motors capable of placing 150 payloads into near-earth orbits.

The Polar Launch Vehicle is considered to be a giant step in rocket technology. The vehicles, with their liquid second stage, will be capable of injecting a 600-kg satellite into a polar sun-synchronous orbit.

The director of the Vikram Sarabhai Space Centre, Mr V. R. Gowarikar, told reporters that the beginning of Indian space launching vehicles was made 12 years ago, with the blasting of a 7-kg rocket from Thumba. Today India is the seventh country in the world to launch a satellite by its own SLV.

When the ASLV and PSLV are successfully launched, India will achieve its goal of launching the 600-kg-class satellites at an altitude of 36,000 km from the Earth. The Vikram Sarabhai Space Centre is fully prepared to produce these vehicles and about 5,000 people, with about 1,400 scientists and engineers, are now toiling for the success of these highly-advanced sophisticated rocket launching. All the facilities at the centre were being augmented for the purpose in an attempt to totally indigenize the technology.

CSO: 5500

SPACE TECHNOLOGY TO AID RURAL TELEVISION

Bombay THE TIMES OF INDIA in English 22 Dec 80 p 22

[Text] Madras, December 21 (PTI):

A 'mini TV centre' in every village of the country is the 'dream project' of the Union government to achieve its cherished objective of eradicating illiteracy from rural India, be it 2000 AD or slightly beyond.

Capable of fruition is this dream of great political figures like Pandit Jawaharlal Nehru, Dr. Sarvepalli Radhakrishnan and the Prime Minister, Mrs. Indira Gandhi, if the concerted efforts being made towards educating rural India through TV programmes now being made at the Space Application Centre (SAC) (Ahmedabad) is any indication, writes a PTI correspondenct who visited the centre recently.

The satellite instructional television experiment (SITE) of India that covered over 500 selected villages through the U.S. applications technology satellite has proved to be a successful forerunner for more ambitious programmes.

Low-cost Stations

Fitting initially into this broad framework is the Indian satellite INSAT (custom-built by the United States) carrying a communication payload of 600 kg., a part of which will be used by the SAC for imparting education to farmers through TV programmes.

Work on the INSAT programmes has led to considerable innovations and experimentation which prompts the SAC scientists to assert with confidence that they would be capable of fabricating TV stations at very low costs that might well serve as permanent bases for teaching the rural people.

A TV station in an urban centre would cost as much as Rs. 5 crores including the tower. But the SAC has developed technology for fabricating small-size TV stations for Rs. five lakhs and mini-stations which might cost only Rs. 50,000 per unit.

Space technology materials are being used by the SAC to fabricate colour and black and white video tape recorders, TV cameras and other paraphernalia that go into making the 'low cost TV studio'. A prototype 'low cost TV studio' has already been successfully experimented with by the SAC scientists for educating tribals in Kheda district of Gujarat.

Permanent Satellite

The main idea of the project seems to be to have a permanent satellite with a communication payload positioned over the Indian sub-continent.

As Prof. Yash Pal, director of the SAC and winner recently of the prestigious Marconi award for excellence in communication, says: "Space platforms provide us with a unique capability of seeing, and interacting with, large parts of earth simultaneously. Through space communication, we develop a new concept of neighbourhood, which is independent of distance or physical location."

'To a country like India, it provides a means of reaching, and of being reached by, people, who have been neglected during the normal process of industrialisation. The possibilities of using this enhanced capability are enormous--decentralised industrial growth, programmes in formal and non-formal education, support to activities in agriculture and family welfare and programmes of national integration', Prof. Pal explained.

Consequently, the linking of the various TV stations in the country via a microwave link through a satellite has been given lower priority by the I and B ministry than before. The emphasis is now on reaching the countryside.

CSO: 5500

BRIEFS

INSAT STAFF TRAINING--New Delhi, December 15 (PTI): The film and Television Institute of India, Pune, is drawing up plans in consultation with Doordarshan to structure special courses for television personnel required for the INSAT satellite programme, according to the annual report of the institute for the year 1979-80 presented to the Rajya Sabha today by the deputy minister of information and broadcasting, Miss Kumud Joshi. The training will be specially geared to the needs of television staff in the rural development programme. The report also said that the plans for utilisation of INSAT for expansion of television facilities in the country are likely to make a tremendous demand for the augmentation of training facilities in the TV wing of the institute. [Text] [Bombay THE TIMES OF INDIA in English 16 Dec 80 p 7]

CSO: 5500

BRIEFS

NEW SUPER DIODE DEVELOPED--Tokyo, Jan 14, KYODO--The electrotechnical laboratory of the Agency of Industrial Science and Technology has succeeded in the test manufacture of a new diode whose ability to catch radio waves is claimed to be some 40 times greater than existing diodes. The agency said Tuesday it believes success in the development and manufacture of the new diode, called the Super Schottky Diode, will aid in improvement of satellite communication and remote sensing technologies. The Super Schottky Diode developed by the electrotechnical laboratory uses niobium, whose electric resistance drops to zero under extremely low temperature, as the metal junction. The Schottky diode, an electron element comprising semi-conductors and metal, was developed as an element to receive electro-magnetic waves. It already is being used widely as a detector for receiving milliwaves in the 30 to 300 gigahertz range. [Text] [OW140055 Tokyo KYODO in English 0024 GMT 14 Jan 81]

CSO: 5500

BRIEFS

TELECOMMUNICATIONS **PROGRAM ANNOUNCED**--Five regional radio and television program production centers, costing millions of ringgit each, will be in operation under the Fourth Malaysia Plan. The center at Kuching in Sarawak is nearing completion. Works are going on smoothly for similar centers at Johor Baharu in Johor state and Kota Kinabalu, Sabah. Efforts are being made to find suitable sites in Alor Setar, Kedah, and Kota Baharu, Kelantan, for the setting up of such centers. These details were given by Minister of Information Datuk Mohamed Rahmat in Kuala Lumpur today at a meeting with directors of Radio-Television Malaysia and the Information Department on Implementations of Projects of the ministry under the Fourth Malaysia Plan. The minister said the centers would help to lessen production workload at the ministry's headquarters. It also helped develop local culture, besides providing opportunity for the local people to participate in various programs. Datuk Mohamed Rahmat announced that 19 million ringgit had been approved for the transmission of television channel two to Sabah and Sarawak. [Text] [BK221254 Kuala Lumpur International Service in English 0630 GMT 22 Jan 81]

CSO: 5500

BRIEFS

NEW RADIO STATION--Radio station at Turbut in Baluchistan Province was commissioned Sunday. It is the second radio station in Baluchistan and 12th in Pakistan. Speaking on the occasion, the chairman of Pakistan Broadcasting Corporation said that the station would put out a 6-hour program daily, including a 2-hour program originating from Turbut. It will cover an area of 800 square km. [Text] [LD051628 Karachi Overseas Service in English 1100 GMT 5 Jan 81]

CSO: 5500

BRIEFS

SHORTWAVE COMMUNICATIONS--The Space Physics Department of the Wuhan University has produced China's first system for selecting frequencies, a device for improving the quality of shortwave communications by reducing the effects of ionospheric interference. The device has been jointly tested by the State Scientific and Technological Commission, the National Defense Scientific and Technological Commission and the Ministry of Education and proved effective. [OW220515 Beijing Domestic Service in Mandarin 1000 GMT 21 Jan 81]

CSO: 5500

CPT SHIFTS FROM MORSE CODE TO VOICE TRANSMISSION

BK150145 Bangkok NATION REVIEW in English 15 Jan 81 pp 1, 8

[Text] Communist insurgents have shifted from their morse code to clandestine voice transmission for internal communications, senior military intelligence sources reported yesterday.

The morse transmission began in August, 1979 soon after the Voice of the People of Thailand (VOPT) radio station was closed down. On December 14, last year, the Communist Party of Thailand [CPT] resorted to voice transmission for their internal communications, the sources said.

"It's not a radio broadcasting station as had been earlier speculated," said the sources.

The transmission base, according to the sources, appeared to be from Kunming in southern China.

Contents of the clandestine voice transmission have mostly been directives from the CPT to members at the lower and operation levels, the sources added.

"Some of the messages are instructions to the operatives to carry out certain specific tasks," the sources said.

The audible transmission hours are between 9:30 am to 11:30 am [0230 GMT to 0430 GMT] every day over 8650, 9250 and 9700 kilowatt [as published] frequencies, the intelligence sources said. "The messages are mostly for the northeast."

The sources said such transmission had not been in existence before the closure of the outlawed VOPT.

Another point of transmission is north of Amphoe Phua, Nan Province which is beamed every Tuesday and Friday beginning at 7:00 am, they said.

The sources said there were no signs of a full-fledged revival of the VOPT for the time being.

Diplomatic sources had speculated that the clandestine radio, closed down on July 12, 1979, had resulted from pressure from the Chinese Government which has been trying to promote government-to-government relationship with countries in this region.

CSO: 5500

THAILAND

BRIEFS

RADIO PHOTO VIA SATELLITE SERVICE--The Communications Authority of Thailand has started a regular photo transmission service via satellite. Transmission will take only 36 seconds to 1 minute to reach destination. The service will be available 24 hours every day and service charges will be at low rates. [Text] [Bangkok Domestic Service in Thai 0530 GMT 5 Jan 81 BK]

CSO: 5500

BRIEFS

NEWS AGENCIES MEETING HELD--Hanoi VNA 17 Jan--Representatives of the socialist countries' news agencies met in Prague from January 13-15 to discuss "certain questions on the analysis of the enemy propaganda and on the coordination of propaganda to foreign countries." In their speeches, speakers laid stress on a coordinated policy against the enemy propaganda directed at the socialist countries and the non-aligned movement. They also paid attention to problems concerning detente, the struggle for peace, the imperialists' propaganda on socialist democracy and on human rights, etc. The VNA delegation made a speech on "Beijing's propaganda methods against socialist countries in Asia." [Text] [OW171535 Hanoi VNA in English 1513 GMT 17 Jan 81]

CSO: 5500

CANADA'S ATTITUDE TOWARD TRANSBORDER DATA FLOW

Paris LE MONDE DIPLOMATIQUE in French Dec 80 pp 16, 17

[Article by Charles M. Dalfen*: "Canada: A Realistic Approach"]

[Text] The collection, transportation, processing, and utilization of information today poses new problems to modern societies and citizens. Many countries have been moved to make new laws in order to prevent a harmful use of data. But data flow does not stop at borders, any more than the problems that they raise. In fact, it is not enough to protect the privacy and interests of citizens who could be harmed by other jurisdictions. In the international sphere, countries themselves become as persons whose interests are at stake and whose vital data are vulnerable.

Thus misgivings with respect to the collection of data on the mineral or agricultural resources of a country by reconnaissance airplanes or satellites are already apparent. Dependency on data banks located abroad, the risks of harm to national sovereignty, fear of cultural erosion are points that are in question.

It is not only a question of a conflict of economic interests between countries, but also of a more and more strained episode in a game that is being played in a number of countries between a country and multinational companies--multinationals that some charge are working only in their own behalf and, if necessary, against the interests of the jurisdictions in which they operate. Is one aware that multinationals will corner almost 20 percent of the total world GNP (gross national product) in about 1985?

An increase in pressures urging a limitation of transborder data flow is thus easily explained: requests for permits for exportation, a review of files, the dissuassive pricing of telecommunications.

These restrictions will probably be increased soon. And this will occur in spite of their negative effects on the economic efficacy of some national enterprises; in spite also of the difficulty and the complexity of application of these measures, of the multiplicity of the technical methods used to transfer data; and in spite of the eloquent arguments, as well as the flattery, that will spread from all sides.

---

* Vice chairman of the Canadian Broadcasting and Telecommunications Council.

It may also be that as countries make progress in setting up their own data infrastructure and acquire greater mastery over their data, they will become more confident and their fears will diminish. One understands the importance of encouraging and helping their national efforts.

A greater freedom of data flow supposes an elaboration of international control principles. In this domain one sometimes opposes national interests against international interests. This attitude does not seem sound. First of all, such a thing as a "free flow" has never existed. For example, we have long experienced tariff walls and telecommunications laws. Next, for better or for worse, there are no disembodied international interests, independent of the interests of the sovereign countries that compose the international community. There are only some national interests (and perhaps some juridical entities) that are expressed in international terms.

One would give a better account of the debate by describing a balance that is being sought between the nations' interest in facilitating all kinds of transborder data flow and the no less legitimate interest in obtaining sufficient control to guarantee some protection. In fact, countries have sought this communications balance since 1885.

To again turn to the now familiar expression of the general manager of the Swedish Data Inspection Office, paraphrasing John Locke: "Free international data flow must be regulated in order to remain free."

For that it is of course necessary to resolve a certain number of matters, like the definition of different types of data. Data classification can be made according to subject (individual, institution, country), its field of application (scientific and technical, juridical, economic).

It is not always easy to make distinctions. Thus, medical data in the files of insurance companies are both "personal" and "commercial," because they are used for the proper running of the company; and can be considered as "governmental" because they could be useful for public health and hospital administration. Information on the mineral resources of a country can be classifed not only under the heading "business," "governmental," and "personal" (in so far as the owners of the mine are concerned); but can also be classified as economic, scientific, related to resources, and so forth).

Another question is posed: whether to regulate the flow or only operations having to do with reception (access, processing, storage). In the first case, the problem concerns communications as a whole; in the second, it is limited to operations carried out in the country of reception, which after all is the main problem.

In industrialized countries, but in others also, free access to all kinds of data is as important as the protection of the data. Regulation of the field might be expressed in several manners: one might define the obligations of governments and international means of redress, or rely on jurisprudence to resolve juridical problems by national laws. One might take one or the other of these approaches into consideration. With respect to access to data and their protection, it is not very likely that countries are ready to accept many obstacles. At most, they may agree to some minimal technical standards, like stipulations concerning access to personal data, some similar legislation for national data and those from abroad, rules prohibiting access to data without authorization. These standards could regulate the matter of the vulnerability of data and that of their secrecy, without regulating economic problems: they could be resolved by means of a participative approach with attribution of the economic benefits to countries according to their role, the attitude that prevails in the case of reconnaissance satellites.

No doubt private companies will make these kinds of arrangements on their own initiative. They may already have done so at times, as for example in the matter of automobile construction, when European and Japanese industries were established in the United States in the 1970's, in reciprocity for American installations in Europe in the 1950's and the 1960's. But governments could also envisage concluding some "computer pacts" by means of international agreements, just as the United States and Canada concluded an agreement in the automobile field in the 1960's, by regarding the North American market as an entity and distributing various manufacturing departments and services among various units within each country.

Discussion for the purpose of ascertaining if this type of agreement would concern both software and data processing services as well as activities having to do with hardware should perhaps wait for a more appropriate moment. The main thing is that, given the enormous growth and importance of the information sector, the latter appears to lend itself of its own accord to this type of economic and political treatment.

Regardless of the problems and complications that are now apparent, it is clear that the benefits promised by an increase in the quantity of transborder data flow justify an assiduous effort by all countries. They will thus reach international principles and (to their mutual benefit) some agreements for cooperation which will meet with great approval in the international community.

8255
CSO: 5500

INTERNATIONAL AFFAIRS

BRIEFS

'CTK'-'ADN' COOPERATION PROTOCOL--Prague, 21 Jan (CTK)--A working protocol for 1981-1982 was signed here today by Ceteka Director General Dr Otakar Svercina and Guenter Poetschke, director general of the G.D.R. news agency ADN. The protocol, based on results of the long cooperation of the two news agencies, devotes special attention to the coverage of the preparations and proceedings of the 16th Congress of the Socialist Unity Party of Germany (SED), major anniversaries and Czechoslovak-G.D.R. relations. It provides for wider exchange of news items about topical national-economy questions and bilateral economic relations. ADN Director Guenter Poetschke was received here by Otto Cmolik, head of a Communist Party Central Committee department. In a friendly discussion, he reviewed the expanding cooperation between Ceteka and ADN, and appreciated the further aims and prospects of their mutual relations. [Text] [LD212040 Prague CTK in English 1747 GMT 21 Jan 81]

CZECHOSLOVAKIAN, BULGARIAN RADIO AGREEMENT--Jan Risko, director general of Czechoslovak radio, and Boyan Traykov, director general of Bulgarian radio, today signed a new cooperation agreement and an attached working protocol for 1981-1982. The implementation of the two documents anticipates the broadening of cooperation in all spheres of radio work. This cooperation will aid the further development of friendship between the peoples of the two countries. [Text] [LD151526 Prague Domestic Service in Czech 1430 GMT 15 Jan 81]

CSO: 5500

BRIEFS

RADIO, TV AGREEMENT SIGNED--The agreement on the supply of equipment for the Zadar medium-wave transmitter between the transmitter and communications work organization of Zagreb Radio and Television and the transmitter factory of the Radio Industrija Zagreb [RIZ] was signed in Zagreb today. Here is a report by Ivanka Nevistic: The signing of the agreement is the consequence of 30 years of business cooperation between Zagreb Radio and Television and RIZ. The medium-wave transmitter will be built on 10 hectares in the immediate vicinity of Nin. The decision to build the transmitter was made last summer. Its implementation has already started with the buying of the land and with the construction of the infrastructure. The Zadar medium-wave transmitter will have four 130m-high aerial masts, and a power of 1,200 kw. The transmitter, the most powerful one in our country, will make reception of Zagreb Radio First Program possible to a large territory of Europe and part of the Mediterranean. The area of Istria and of the central and southern Dalmatia will also be able to receive Zagreb radio programs. The Zagreb Radio and Television has so far had successful cooperation with RIZ and this will be continued in the next medium-term period. This also proves the possibility of Yugoslav producers to master the most complex technology in the production of radio and television transmitters. One more thing: the architectural blueprint was worked out by the architectural faculty in Zagreb. The Zadar medium-wave transmitter will be commissioned on Radio and Television Day 1983. [Text] [LD092156 Zagreb Domestic Service in Serbo-Croatian 1400 GMT 9 Jan 81]

CSO: 5500

BRIEFS

NATIONAL POWER GRID--(NA)--Mendoza--Within the next 3 years the whole of Argentina will be connected by an electric power network of 500,000 volts, according to Water and Energy Board president Anibal Leopoldo Blanco. Blanco presided at a ceremony whereby the national energy services were transferred to the provincial government. He said that the plan to integrate the entire electric system throughout the country would be completed within a short time. It means that power now generated from such plants as Salto Grande, and Yacyreta in the future, would be available to consumers in all parts of Argentina. [Text] [PY031808 Buenos Aires HERALD in English 2 Jan 81 p 9 PY]

NEW FM RADIO STATION—It has been disclosed that the new FM station LRA 21 Radio Nacional Santiago del Estero, which has 25 kW strength, will be inaugurated on 1 March at the latest. [PY021804 Buenos Aires Domestic Service in Spanish 1030 GMT 2 Jan 81 PY]

CSO: 5500

GUYANA

BRIEFS

NEWS AGENCY STARTS OPERATIONS--Georgetown, 15 Jan (Guyana)--Guyana's new news agency--Guyana--started its operations last Sunday. From now on, it will publish regular information bulletins from its offices in Georgetown, in foreign countries and in the country's rural areas. Journalist Courthey Gibson, former deputy director for information, is the editor-in-chief of this agency. The agency's activities will center on the improvement of the flow of information to and from the rural areas. It will extend its activities through sending correspondents to the Caribbean countries. [Text] [LD151447 Belgrade TANJUG in English 0939 GMT 15 Jan 81]

CSO: 5500

BRIEFS

TERRORIST DESTROYS MICROWAVE TOWER--Lima, 8 Jan (Latin)--The police have reported that the Andean city of Ayacucho, 400 km southeast of Lima, was still isolated today from communications with the rest of the country 24 hours after an attack with dynamites against a microwave tower. The damaged microwave tower links Ayacucho with all the rest of Peru through telephone transmissions, television service, long distance telephone service and telex. This is the third attack against a tower in the Central Sierra. The other two towers supply electricity to provinces of the southern Andean zone and of the southern Peruvian coast. As in the previous attacks, police officers attributed the attack to members of the small extreme left group Shining Path. The tower is installed at 4,500 meters above sea level, repairing it will cost an estimated $400,000. Attacks with dynamite have been recorded in Ayacucho during the past 6 months against public buildings, police stations, offices and houses of political parties, without causing any casualties. [Text] [PY081658 Buenos Aires Latin in Spanish 1554 GMT 8 Jan 81]

CSO: 5500

KUWAIT, JORDAN TO FUND UPDATED PHONE NETWORK

Kuwait KUWAIT TIMES in English 29 Dec 80 p 2

[Text]

A LOAN agreement was signed here yesterday by the Arab Fund for Economic and Social development (AFESD) and the government of Jordan for a KD 3.7 million loan to finance the second pan-Arab telecommunication project.

The project objective is to expand the terrestrial pan-Arab telecommunication network by linking Iraq, Syria, Jordan and Saudi Arabia with modern systems, and to contribute in meeting the demand of the national and international telephone, telex and other services, a Fund's release said.

The agreement was signed by the General Chairman of the Fund's Board of Directors Dr. Mohammed Imady and the Jordanian Ambassador here Saleh Al Shard.

COSTS

The total cost of the project is estimated at KD 11.8 million of which KD eight million will be in foreign currencies. Its cost in Jordan is KD 7.1 million of which KD five million is in foreign currencies and in Syria KD 4.2 million of which KD 2.7 million is in foreign currencies, the release said.

The Arab Fund's loan to Jordan bears an annual interest rate of six percent and is to be repaid over a period of 15 years including a grace period of four years.

In the meantime, the Arab Fund approved a loan of KD 2.7 million to finance the foreign component of the estimated cost of the Syrian portion of the project.

The Jordanian Telecommunication Corporation, the beneficiary, will supervise the implementation and the operation of the Jordanian portion.

The project will be implemented in stages, the last of which is scheduled to be completed in the fourth quarter of 1984, the release added.

With this loan, the Fund's total contribution in financing development projects in Jordan will total KD 22.7 million.

Those projects include the development of electricity, Amman's northern approach, Aqaba water in addition to the pan-Arab telecommunication network, the release said. — Kuna.

CSO: 5500

TELECOMMUNICATIONS PROGRESS REVIEWED

Muscat 'UMAN in Arabic 15 Nov 80 p 3

[Article: "Sultanate in Constant Communication With All Countries of the World Due to Extensive Activity in the Field of Wire and Wireless Communications (an exclusive interview with His Excellency the Minister of Post, Telegraph, and Telephone)"]

[Text] In an exclusive interview with the newspaper 'UMAN, His Excellency the Minister of Post, Telegraph, and Telephone, Karim Ahmad al-Harami, stated that there is a new telephone exchange which covers most of the needs of the population of Muscat and Matrah al-Kubra, and that there will be 10 other exchanges for the remaining regions of the Sultanate.

Additionally, these new exchanges for al-Qaram, al-Watiyah, al-'Adhbah, al-Hajez, Quryat, and al-Masna'ah will accommodate 20,200 telephone lines.

As for the southern region, there are four telephone exchanges and new expansions.

Microwave to Connect Nazwa and Salalah

His Excellency added that among the vital projects to be undertaken is the project to put into operation the newly developed "microwave" equipment to connect communications between Nazwa and Salalah at a distance of 1,000 kilometers, and to connect Nazwa with 'Ibri at a distance of 140 kilometers, and Matrah with al-'Adhbah at a distance of 40 kilometers.

Likewise, His Excellency explained that 10 November will be the opening for the communications project in the Musandam region via satellites established in that region which will be tied in with satellites in al-Hajar.

His Excellency additionally stated: "Through this station television programs, and telephone and telex communications will be conveyed via the satellite."

600 New Telex Lines

On the subject of the new telex lines His Excellency said that there will be an increase in the number of telex lines of some 600 lines, bringing the number of operating telex lines in the Sultanate to 1,700.

Extensive International Activity

After this His Excellency moved on to a discussion of the Ministry and its associated organizations and unions, stating that they are affiliated with seven Arabic and international unions and organizations as follows:

--The Arabic Postal Union.

--The Postal Union for Wire and Wireless Communications.

--The International Union for Wire and Wireless Communications.

--The International Union for Space Communications.

--The Arabic Organization for Space Communications.

--The Gulf Postal Association.

Likewise, during the period between 1976 and 1979 the Sultanate participated in 12 conferences for regional and international organizations. During the same period the Sultanate participated in 21 meetings and conferences for wire and wireless communications.

His Excellency added that it has been decided that the Sultanate will join a maritime organization for wire and wireless communications. In the organization members are able to communicate from ship to shore with equipment operating via satellite, and that the Ministry has a coastal station in al-Watiyah and expects to build another small station to consolidate communications between Salalah and Muscat.

His Excellency explained that this organization is associated with the United Nations and the International Union for Communications, and that its membership includes many Arab nations.

Total Communication With All Corners of the World

His Excellency went on to say that the Sultanate has known wire and wireless communications since 1877, when there was an underwater cable which tied Muscat to Aden. Then another cable was established in 1885 to connect Muscat to Karachi, and in 1951 communications were conducted to all corners of the world by way of Bahrain.

Telephones began a slow progress from 550 lines in 1970 to 3,000 lines in 1974 to 16,000 lines in 1978 to 23,000 lines in 1979.

27 Telephone Exchanges in the Sultanate

His Excellency returned to the discussion of telephone exchanges in the Sultanate saying the beginning was in 1970 with only 3 exchanges, and that there are now 27 exchanges and 325 branch switchboards.

As for international communications there were a number of circuits connecting Muscat to Salalah and Bahrain in 1970, but now communications are with the entire world via land station and satellite, with a capacity of 182 channels to which 24 new channels will be added during the ongoing expansion at the station to enable connection with Britain, Saudi Arabia, Italy, the Emirates, Bahrain, India, and Pakistan.

New Projects in the Five-Year Plan

His Excellency said that the ground station at al-Hajar has twice achieved first standing among 45 ground stations around the world.

This is a clear indication of the progress in wire and wireless communications in the Sultanate, especially in international communications, with the number of paid minutes rising from 50,000 in 1970 to almost 3 million minutes in 1979.

There is a coin telephone project which will be commenced during the month of December. These telephones will be distributed in crowded and important areas such as hospitals and with a share of them going to the other cities. The project will begin with 1,000 telephones.

A rate of 25 Baiza can be paid for (a call in) the same area and a rate of 100 Baiza for distant areas.

We will increase this equipment in the future. Among the projects to come in the five-year plan is the establishment of a special building to conduct wire and wireless training, since there are now 20 representatives. Graduates will be sent abroad to continue their studies.

Fifty million Rial were sought to develop the Post and wire and wireless communications, in which the International Bank participated with 21 million dollars. There is also a project to establish a special school to train postal workers, a number of which will then be sent abroad for training in the most modern techniques used in sorting mail.

These are some of the projects that were mentioned during the interview of His Excellency the Minister by 'UMAN:

--Erecting modern post offices in various regions of the Sultanate, and the utilization of new postal services in them.

--Furnishing an adequate number [illegible]s to deliver letters.

--Opening a school for postal training.

--Building a permanent center for the Ministry.

--Establishing postal service on Masirah Island.

Postal Stamps

In another aspect, the Ministry of Post, Telegraph, and Telephone issued several stamps on several occasions, among them the Moslem New Year, and a stamp dedicated to the blind--which was issued based on a request by the Arab Blind Association--at a price of 10 Baiza added to each letter to be posted.

There are other stamps which were issued and which will be issued shortly on 17 November on the occasion of the National Holiday, and two stamps on the occasion of Army Day will be issued on 11 December.

On the new increase in postal rates His Excellency said this increase was issued by the International Postal Association.

0698
CSO: 5500

OFFICIAL DISCUSSES DEVELOPMENT OF TELECOMMUNICATIONS

San'a' AL-JUMHURIYAH in Arabic 23 Nov 80 p 3

[Interview With Muhammad al-'Arashi, YAR undersecretary of Communications and Transport; "YAR Exerting Efforts to Develop Telecommunications on Basis That They Are One Half of Development"]

[Text] Following is the text of the interview conducted by Radio London [Presumably BBC] with YAR [Yemen Arab Republic] undersecretary of communications and transport:

An agreement was signed recently in San'a' with the British Telegraph and Wireless Company. Muhammad al-'Arashi, the YAR undersecretary of communications and transport is in London currently and I have taken the opportunity of his visit to the BBC's Arabic Section to conduct the following interview with him:

[Question] Brother Muhammad, as a beginning for this interview, let me ask you about the reason for your current visit to Britain.

[Answer] Our visit to Britain is in response to an invitation from the Limited Telegraph and Wireless Company that has been working in the YAR for nearly 10 years.

An agreement was signed recently between the government and the Telegraph and Wireless Company renewing the company's contract for 10 more years.

This agreement is one of the agreements important to the Yemeni economy because the company has been entrusted with developing YAR's external communications.

[Question] What, in detail, are the services that will be offered in accordance with the recently concluded agreement?

[Answer] As I have already said, the detailed services that the company will offer the YAR are external communication services, be they telephone, telegraph or telex services.

[Question] Concerning internal communications in the YAR which is known for its large area, can you tell us about the internal telephone communications?

[Answer] The fact is that internal communications in the YAR have developed considerably and that telephone lines in the cities have increased from 1,000 to 9,000 lines. The government has invested more than 50 million pounds sterling to develop the internal communications and [steps] have been taken in this regard with a French telephone company to install an internal network with nearly 100,000 lines covering the various cities of the YAR.

[Question] Mr al-'Arashi, can you tell us about communications between San'a' and the other cities of the republic? Does this communication take place through direct [telephone] lines?

[Answer] So far, there are no direct telephone lines between the various cities. But in the near future, God willing, there will be direct lines between the cities through an open channel to be installed by the French company and to be completed around 1985.

[Question] Insofar as the Arab countries neighboring the YAR are concerned, are there direct telephone communications or different kinds of communication?

[Answer] At present, there is a direct telephone line between us and the southern part of the homeland. In the near future, the Kingdom of Saudi Arabia and YAR will establish direct communications between them.

[Question] Let us return to the agreement concluded in San'a' before your current visit to Britain, can you tell us about the costs of this agreement and the means of financing it?

[Answer] As I said at the outset of the interview, the main goal of the agreement is to develop YAR's external communications. The Telegraph and Wireless Company will invest nearly 120 million riyals to develop the external communications.

[Question] How will the equipment be supplied for this project?

[Answer] The company will develop the external communications and will finance this project on the basis of utilizing it in the interest of Yemen and of the citizens.

[Question] We now come to training and to the cadres that will carry out these ambitious projects.

[Answer] One of the most important provisions of the new agreement is the provision committing the company to carry out the operational functions in the first 5 years, meaning that in accordance with the agreement the company is committed to train all the cadres needed to operate the external communications within 5 years.

[Question] Concerning your current visit to Britain which has come in the wake of the conclusion of the agreement, you have visited certain installations that have something to do with your work and with the concluded agreement.

[Answer] The Telegraph and Wireless Company has given me the opportunity to visit the training areas [facilities] in the United Kingdom and in Bahrain. In fact, I have been impressed by the effective means of training that help to prepare capable engineers to work in the spheres of external communications.

[Question] Mr Muhammad al-'Arashi, do you intend to send civil servants or some Yemeni citizens to be trained in the centers that you have visited in Britain?

[Answer] The company has presented an effective program to the Yemeni government to provide training for the Yemeni cadres. Numerous Yemeni citizens will be sent to Britain and Bahrain and a training center will also be set up in the YAR.

[Question] What are the projects that your ministry, the YAR Ministry of Communications and Transport, is preparing for the coming years?

[Answer] The truth is that the YAR government, embodied in the young and ambitious political leadership, is working to develop telecommunications on the basis of the conviction that telecommunications constitute one half of development and an effective means for the country's prosperity.

To develop telecommunications, the YAR has invested nearly 60 million pounds sterling. There will be direct communication [telephone lines] between the cities, as I have already pointed out. Moreover, most of Yemen's centers will be linked with the capital through stations built for this purpose.

8494
CSO: 4802

PROGRESS MADE IN IMPLEMENTATION OF PANAFTEL NETWORK

Monrovia NEW LIBERIAN in English 19 Dec 80 pp 1, 6

[Article by Mike T. James]

[Text] The African continent is to get a substantial communication face-lift within the next seven years, according to the project reports presented at the 3rd Pan African Telecommunications (PANAFTEL) conference which ends here today.

The reports disclosed considerable progress which has already been made in the implementation of the PANAFTEL network since the 2nd African Telecommunications Conference held in Kinshasa in 1975.

Over 15,000km. of radio-relay routes, 2800km. of tropascatter systems, 400km. of coaxial cable, and 5,000 km. of submarine cable have been brought into service in the PANAFTEL network.

A further 10,200 route-km. of wide-band transmission facilities now under construction are scheduled to be completed by the end of 1981. These include 9,300km. of radio relay, and 900km. of submarine cables.

TELEPHONE CENTERS

In addition, the last five years have seen the construction of 27 automatic international telephone switching centers, while another 7 more centers are under contract for completion by 1981.

Most countries in the region already have semi-automatic or full automatic international telex exchanges.

Twenty-six Satellite communication earth stations have also been installed to supplement terrestrial transmission facilities, and to provide international services via the Atlantic and Indian Oceans Intelsat transponders.

This period has also seen tremendous improvements in the communication problems of individual African states by the construction of an additional 36 domestic earth satellite stations to facilitate transmission between the capital cities and provincial centers, using transponders leased from the

Intelsat (International Telecommunications Satellite) network. By the end of 1981, the Eastern, Western, and Southern sub-regions will be provided with substantial wide-band transmission facilities and international switching centers.

Almost all of the countries in those sub-regions will also have operational satellite communication earth stations. Seven of the ten countries which do not have such stations will have the satellite projects either under advanced study or implementation by the end of 1981.

The reports noted, however, that because of financial difficulties, some gaps are expected to remain in the network, especially in the central sub-region and between the individual sub-regions.

RADIO/TV IMPROVEMENT

Radio and television broadcasting are also lined up for substantial improvement especially with regard to the development and improvement of a transmission infrastrusture.

The 11-day conference which opened here early this month, has been examining problems relating to the maintenance and operation of the PANAFTEL network.

During their deliberations, the delegates numbering over 250 drawn from various free African nations (including the newly independent Zimbabwe), also focussed attention on the "Impact of Digital Techniques on the PANAFTEL network".

The debate having shifted from "whether" to "when" to introduce the digital system, the African communication experts were unanimous in their recommendation that the PANAFTEL network move towards "digitization", in place of the present "Analogue" system.

This recommendation is in consideration to the numerous advantages (compatibility, cost-effectiveness, etc) which the digital techniques have over analogue modulation.

The International Telecommunications Union, along with the various financing institutions (African Bank for Development, Economic Commission of Africa, etc) which have been playing leading roles in the implementation of a Pan African Telecommunications network, pledged to continue to give substantial financial material and advisory assistance to the system.

CSO: 5500

BRIEFS

BROADCASTING DEVELOPMENT--Minister for Information and Broadcasting Peter Oldo-Aringo has told department heads in Lamu District that his ministry's aim is to mobilize and motivate the citizens in their development activities. Noting that media communication makes all Kenyans feel that they belong to the same republic, "he pointed out that there are plans to enable all Kenyans to receive VOK [Voice of Kenya] broadcasts to counteract unwholesome propaganda that is broadcast from outside. To this effect, he said, work on the completion of transmitter installations at Voi and Garissa is expected to be completed within this development plan period. He said there are also plans to improve radio reception at the coast, to enhance the tourist industry." [LD190452 Nairobi Domestic Service in English 0600 GMT 17 Jan 81]

CSO: 5500

RADIO-TV INNOVATIONS ANNOUNCED

Tananarive MADAGASCAR-MATIN in French 13 Nov 80 pp 1, 2

[Article: "TV: Toward More Important Local Broadcasts
Radio: An Interesting Poll"]

[Text] Since Tuesday evening, the RTM [Malagasy Radio and Television] has added to its daily broadcast schedule a second news program televised in French, coming about an hour and a half after the broadcast at 2000 hours in Malagasy. This was done for technical convenience and to allow foreigners to follow the local news--the formula used up to now being termed "inadequate" by the director of the RTM himself, Simon Andriamialison. Among foreigners and chiefly in diplomatic circles of Antananarivo, which are becoming more and more numerous, this new arrangement has been favorably received, particularly because the televised national news was presented mainly in Malagasy up to now, which seriously limited their knowledge of current events in the country.

Referring to this "revolution" on the top floor of the SOLIMA [Malagasy Petroleum Company] building in Antaninarenina where the RTM (Television) studios are located, yesterday we asked Simon Andriamialison at his office in Anosy to say some more about this important part of the mass media which he directs.

For television, then, an effort is now being made to reach the 1982 goal, when 50 percent of television production is to be live. At present, a third of the weekly programs (7 hours out of 21) are already live. This is the case for the two televised news programs, and for certain variety shows and magazine features. Specifically on the subject of magazines or documentaries, starting next week the RTM will program on the television screen a broadcast carried out with the assistance of Air Madagascar entitled "Visit Madagascar Off the Beaten Paths..." This will be shown twice a week. It will be an invitation to knowledge if not discovery of the Big Island. Some short films called "Fiction" will also be programmed. Sports programs are largely shot live at present. It is also foreseen that each district town will have its own production center. One of Simon Andriamialison's hopes is to be able to increase the length of daily broadcasts. This is sometimes done for international football matches.

As will be seen farther along, the RTM director is open to criticism and suggestions. So, Mr Director, when will there be major broadcasts such as the interview by Antenna TF (French Television) with President Didier Ratsiraka, which the viewers liked. And when will there be a face-to-face encounter between the press and the country's leading political, social and economic officials? The question was not posed to Simon Andriamialison, but without doubt more than one television viewer would like to see a local production of this type on the television screen from time to time, since the wind at Antaninarenina is currently toward the promotion of locally produced TV.

In any case, with such interesting projects being considered, it would also be desirable to speed up the "democratization of TV" by putting on the market black and white or color sets within reach of everyone's pocketbook, since all the district towns already have television broadcasting centers. Simon Andriamialison was not prepared yesterday to give us a precise answer about that; no doubt today they are still in the stage of looking for the most competitive supplier or suppliers.

As for radio, the status quo as to number of news broadcasts in French (0730, 1330, and 2130 hours) is being maintained. The hours for programs in French (2200 to 0 hours) are also being maintained.

As for broadcasts in Malagasy (0600 to 2200 hours), according to a poll carried out in 1979 by the RTM, the children's broadcast "Ankizy anketrio..." was the most popular among listeners (65 percent), followed by "Tantara Malagasy" (Malagasy History) on Saturday, the "Vaovao" (news broadcasts)--50 percent, on an equal basis with "Tokotapaka." Moreover, the same poll asked RTM for more "possibilities for the public to express itself on the radio, answers to their questions, more songs and variety shows, not only Malagasy but 'all directions,' and also to be better informed on the national and international daily news."

Simon Andriamialison stated to us yesterday that he is open "to all remarks and to all criticisms," that people can also "congratulate the RTM from time to time, for its efforts when deserved, and not just hurl criticisms on every occasion."

Finally, the "FM" of RTM carries on its way between 1800 and 2200 hours. This is an experimental station which could one day become a regional station. At present, its broadcasts can be received up to about 80 Kw around Antananarivo.

Another station--less known--is the RTM-ANC Free Radio, broadcasting from Antananarivo, which has been operating on short wave for some months and which is part of our contribution to the national liberation struggle in South Africa, led with the strength of conviction by the African National Congress [in English]. It broadcasts each day from 2030 to 2230 hours, in English and in local South African dialects: Zulu, etc.

5586
CSO: 5500

BRIEFS

PRC TELECOMMUNICATIONS AID--A document was signed this morning between Mali and the PRC at the headquarters of the Ministry of International Cooperation. According to this document, work will begin on a diplomatic communications center linking the Ministry of Foreign Affairs and International Cooperation's headquarters with Mali's diplomatic missions. His Excellency Du Yi, PRC Ambassador to China [as printed], signed for his country, while Alouine Blondin Beye, Mali's minister of foreign affairs and international cooperation signed for our country. [Excerpt] [Bamako Domestic Service in French 1500 GMT 13 Jan 81 AB]

CSO: 5500

BRIEFS

TV DEVELOPMENT REPORTED--Nelkan (KHABAROVSKIY KRAY)--Television screens have lit up in the apartments of residents of the village of Nelkan in the north of Priamurye [region north of the Amur River]. An installation of the "Ekran" satellite communication system which has been set up here has made it possible to receive transmission from Moscow. [Text] [LD141119 Moscow IZVESTIYA in Russian 11 Jan 81 morning edition p 6]

CSO: 5500

NORDIC MINISTERS AGREE TO CONTINUE NORDSAT STUDY

Copenhagen BERLINGSKE TIDENDE in Danish 22 Nov 80 p 7

[Article by Jens Thomsen]

[Text] The plans for a joint Nordic TV satellite have not yet been shelved. But Nordsat will not be brought into orbit over Scandinavia until 1983, at the earliest, when a German TV satellite will already be in orbit.

At a meeting with the Nordic ministers of cultural affairs, transport and education in Copenhagen last Friday, Minister of Cultural Affairs Lise Østergaard stated that it had been agreed to continue the Nordsat study, and that it was endeavored to reach Nordic agreement by the end of 1981.

None of the Nordic ministers participating in the council meeting in Copenhagen had wanted to reject the Nordsat project definitively. However, Icelandic permanent undersecretary Birger Thorlacius conceded that Iceland will probably reach a final decision on the matter today. The Icelandic Society of Authors, among others, had opposed the Nordsat project.

"Now we want instead to view the matter positively and to study it carefully," Birger Thorlacius added.

Yes and a Conditional Yes

The Swedish Minister of Education Jan-Erik Wikstrom simplified the views of the Nordic countries by saying:

1. Norway clearly answers yes;
2. Denmark and Finland answer yes conditionally:
3. Sweden cannot answer yes, but will not answer no either.

The official report on the council meeting of Nordic ministers on Nordsat states that, in the opinion of the council of ministers, a dissemination of the radio and TV programs of the individual countries will considerably further the mutual interest in, and the knowledge of, the Nordic neighboring countries, and will increase the possibility of ethnic and minority language groups to participate in the common cultural and informative programs in their own languages. But there are still problems which require closer evaluation, such as the number of satellite channels, their distribution, the question of advertising, and the level of translations as well as the distribution of the costs of the satellite. The project also holds certain industrial policy possibilities, the council of ministers said.

Many Possibilities

Lise Østergaard said that the technological development within the area of TV satellites is so fast that it is today impossible to assess all of the possibilities.

If the council of Nordic ministers succeeds in reaching an agreement to orbit Nordsat by the end of 1981, the parliaments of the individual countries will, on the basis of budgetary evaluations, reach the final decision, whereupon it will be possible to take up the next phase, the technical aspects of the project. The final orbiting of the satellite is not expected to take place until 1983-85.

7162
CSO: 5500

FAEROES BECOME LAST EUROPEAN AREA TO GET TELEVISION

Stockholm DAGENS NYHETER in Swedish 30 Nov 80 p 40

[Article by Calle Pauli Ola Sall]

[Text] At the moment, the last TV transmitters are being set up in the Faeroes. Consequently, all of the 18 inhabited islands will be covered by private--and partly illegal--transmitters.

It is only a year since the first transmitter was built in the Faeroes, which became the last European area to get television. The question only is whether the unique Faeroese culture will be able to survive the pressure from the American TV series.

It has become the highest fashion in the Faeroes today to have a TV set at home in the living room. Sales of TV sets are proceeding at a record rate after having previously been almost at a standstill. Only members of the small TV society, a society of hobbyists who exchanged video cassettes among one another, would previously come in to buy some of the TV sets which were being stocked way back in some store room.

Private TV Network

However, new TV shops are now being opened, and people will gather outside the show-windows when the sets are on.

Today, the transmitters reach 80 percent of the 43,000 inhabitants of the Faeroes. Since the first transmitter was set up on Streymoy Island in March of 1979, several slave transmitters have been started on other islands. More than half of those who can receive the programs have bought television sets.

The TV network is being operated completely under private management. It began with the TV society with its 300 members applying to the government of the Faeroes for permission to set up a transmitter for its hobby activities. This would enable them to avoid the inconvenience of exchanging video cassettes.

The government of the Faeroes gave its permission, and Phillips was willing to set up a transmitter--completely free of charge. A private person donated a camera to the society. In 1979, the camera was used for a total of 21 hours of transmission. Last year, all of it was domestic production.

The second transmitter was set up on Eysteroy Island in October of last year by the local TV dealer.

Since then, more transmitters have been set up and coupled together. Two women are employed on a part-time basis to take care of the bookkeeping and to exchange video cassettes on the tape recorder during the 15-20 hours of transmission per week.

No News Programs

Practically all transmissions are entertainment programs--American, British, and Danish series. An occasional long film and sometimes a children's program. News programs, documentaries or educational programs are not shown.

All of it recorded from the Danish TV--completely illegally--by a private person who sends the cassettes by mail to the Faeroes. There is no agreement with the Danish Broadcasting Corporation for compensation, but the Danish Broadcasting Corporation has decided to connive at the trade, seeing that it probably will stop within the next year.

For the TV broadcasting which the Faeroese state is planning will then have been started. The state is now constructing a transmitting network parallel to the private one, but it is part of the agreement with the TV society that the state will take over the transmitters when the time comes for it.

The Faeroese government thus has plans of its own for TV transmission, but these plans are entirely on a technical level. There are no program policy plans and no stated goals for the TV transmissions. The plans for the new broadcasting house to be built do not even incorporate a TV studio.

Culture Affected

"If the politicians were interested in trying to save the Faeroese culture, they would see to it that that there would be transmission in the Faeroese language as well as a domestic program production," says Eydun Andreassen, who is doing research into the effects of TV on the Faeroese culture.

He is disappointed at what he calls the indifference of the politicians to TV and its effects on the vigorous cultural life of the Faeroes.

Best known abroad of the Faeroese culture are perhaps the handicrafts--the typical Faeroese sweaters which are hand-knitted by women in the villages.

In the isolated villages as well as in the towns of Torshavn and Klaksvik, the Faeroese 'poem dance' (dancing in a chain while singing hundreds of verses) still exists and is being danced on all festive occasions.

Less known abroad are the lively amateur theater activities and all the bands found in the various villages.

The country, which has as many inhabitants as a medium-sized Swedish town, has got eleven brass bands, one chamber orchestra, seven choirs, thirty-one pop orchestras, ten gospel groups, one big jazz club, one professional theater group, etc.

Last year, a total of approximately 25 different plays were performed by a group of ten amateurs and several groups composed at random. (Information obtained from the Statistical Year-Book of the Faeroes, 1979.)

Unique Research Work

The effects of TV on all of this as well as on cinema-going, church activities, sports activities, etc., are questions which Eydun Andreassen seeks to answer. He has got 400,000 kroner from the Danish cultural council to examine the effects of TV on the cultural life in the villages of the Faeroes.

Eydun Andreassen's work is unique. It is most unusual for anybody to be able to carry through a study of a society prior to, and after, the introduction of TV.

The four villages on which he is doing his special study are all of them located outside of the area covered by the transmitters. In the course of the winter months, these villages as well will be covered by new transmitters. But, by then, Eydun Andreassen will already have completed the first part of his study--showing how the local culture functions without the effects of TV.

He hopes, later on, to obtain funds to carry through the second part of the work which he has now started, i.e. making a similar study in a few years and comparing the results. Only then will he be able to state with certainty what the effects of TV have been.

But, already today, some effects may be seen in the villages which have got TV. Torshavn's vigorous society of pensioners has thus had to close down after the introduction of TV.

"The first season caused a drastic drop in cinema-going. All amateur theaters complain of smaller audiences. Sunday nights used to be typical theater evenings; today, it is impossible to have performances on Sundays. All cultural events are being shifted to evenings in which there is no TV, and the groups are competing more keenly with one another, which results in reduced audiences," Eydun Andreassen says.

Poor Performances Become Good Ones

"The Faeroese Islands have never had any centrally governed cultural life, such as the Swedish National Touring Theater or the Swedish Institute for National Concerts. People here create their own culture, and most people are involved in some kind of cultural activity."

"I wonder what will happen when we get a centrally governed disseminator of culture, such as TV."

"Still, I am not as pessimistic today as I was when TV was introduced. I believe that the cultural life will adjust. TV may have a positive effect, for example on amateur theaters, the performances of which, frankly, have often been of a poor quality. They will now be forced to enter into competition with TV, and we have seen examples that this has had a positive effect. Several performances during the past year have been of an unusually high quality and have become box-office successes.

Eydun Andreassen says that all changes in the cultural life cannot be attributed to the effects of TV. Also 'the new times' have their effect.

"Actually, there is no strong desire among the Faeroese to get TV. It has been clear for the last 20 years that TV would come sooner or later, but there have been no pressure groups for, nor any protest groups against, TV."

"At any rate, it is now too late to put a stop to the transmissions, and that is not my goal either. The most important thing right now is that we get programs started in the Faeroese language. In a few years, the Faeroes will be reached by foreign TV satellites, for example by Nordsat, if this project materializes. With a domestic TV production, we have got a chance to rescue part of the Faeroese identity among the young people," Eydun Andreassen says.

7262
CSO: 5500

OPPORTUNITIES, ACCOMPLISHMENTS IN PLANS FOR TELEMATICS

Paris LE FIGARO in French 2 Dec 80 p 7

[Article by Pierre Zapalski "The Battle for Telematics: France's Assets"]

> [Excerpts] In the battle for telematics the Americans secured an advantage in the field of communication satellites when they launched the SBS 1 [expansion unknown], financed by IBM 3 years before Telecom 1, fruit of Franco-German collaboration. However, the French hold some trumps in hand which are not insignificant if they only know how to take over foreign markets and, no doubt, create a component parts industry, producing semi-conductors which are the key to the fourth industrial revolution.

A report prepared under the auspices of the Planning Commission by a working group headed by Henri Pigeat, a P-DG [president director general] of AFP, asserts that telematics constitutes "one of France's opportunities, provided a more decisive policy is followed."

Based on the principle that in the telephone field significant progress has been made since 1976, the report's authors consider that now one must build on that experience to develop new operations, according to the following lines of action:

Develop the telephonic project so as to surpass the 24 million principal lines in 1985 and 30 million in 1990;

Modernize and numerate the telecommunications network and install optic vibrators;

Meet the needs for technical training;

Make available to the general consumer telematic receiving sets and basic services;

Prepare for new developments at the end of the decade.

Public authorities have already moved along these lines in earmarking no less than 7 billion francs for telematic development. The state secretary for PTT and the general director of telecommunications have provided themselves with the material facilities for verification through France-radio broadcast [telediffusion] which now stands for the third T of PTT [Postes Telegraph Telephone], and through mastery of the plans for Computation and Computers.

For the moment the monopoly remains a favorable element, but for how long? Telematic development can profit from the effect of Japanese style mass development thanks to the administration's budgets. Thus a videotex will be offered to the subscribers in the department of Ile-et-Vilaine (cost price of 700 to 155 francs, according to estimates making access possible to an inexpensive electronic telephone book. Henceforth one can order from industrialists 250 thousand receivers under still profitable terms. Also the receivers of the "Teletel" experiment at Velizy will be furnished to 2500 "guinea pig households."

It is usual to say that the videotex receivers planned by Telic (CIT [expansion unknown] Alcatel) Thomson Matra, TRT [expansion unknown] (Philips) Europa-color (Thomson) control a market of 30 million receivers in the world, including 2 million francs and they scarcely have any rivals.

Still under the heading of equipment, it must be acknowledged that French industry is in a favorable situation, for telephonic mail "T.83" (Matra, Telic, Thomson, T.R.T.), for which there is already a market of 32 million subscribers in 10 years in France, as well as for mass produced telecopiers (500 francs), the telecopiers for large enterprises (10,000 francs for a market of no more than 100,000 instruments).

It has a slight advantage over its principal competitors, namely the Japanese. However, the service operations are more threatened. Against Teletel, which will see the light of day at Velisy at the end of next year, there is the British "Prestel," which no doubt is less flexible but is already operational. The Japanese "Captain" whose videograms are poorly adapted to the coding systems of the "Antiope" type, and above all the Canadian "Telidon," which is stronger than our system.

9772
CSO: 5500

BRIEFS

COMPUTER-GUIDED PHONE EXCHANGES--During 1981, the National Telecommunications Administration will introduce a new telephone, the Diavox. When connected with the new computer-controlled electronic exchange (Axe), it will call subscribers automatically at the precise time previously programmed from the telephone instrument. An advanced model of the Diavox has 13 push-buttons. Numbers one calls often are replaced by short numbers requiring only two or three fingers pressures. The telephone instrument is also being modified. During the fall, new models for several types of coins, including 5-kronor pieces, will be tested. Automatic machines for advance-reservation cards are also going to be tested. Sweden is getting new, automatic telecommunications lines to some other countries in addition to the 38 with which such connections already exist. That means that we also will be able to dial Iceland, the Philippines and Venezuela directly. The payment schedule is also going to be modified. Now we pay at the end of the period, but during the quarter for which the charge is made. In the future, we will pay in or at the beginning of the quarter in question. If one has telephone trouble in the middle of the night, there will be duty repairmen waiting at home for calls. In heavily-populated areas, the intention is that the repairman will arrive at the customer's residence within 2 hours. [Text] [Stockholm DAGENS NYHETER in Swedish 19 Dec 80 p 33] 9266

CSO: 5500

END

END OF FICHE

DATE FILMED

Feb. 2 1981